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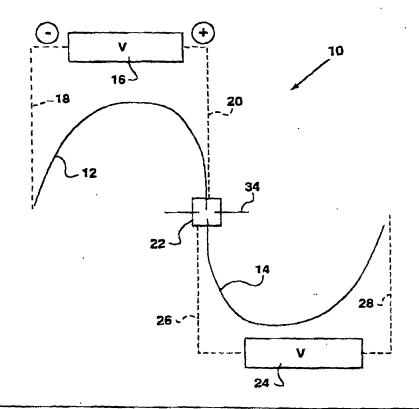
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(57) Abstract

A method and apparatus are provided for separation and detection of components within a sample, particularly biological samples. The sample is subject to a first separation technique, for example isoelectric focusing, electrophoresis or the like. After this first separation step, the sample is separated into fractions, and each fraction is then subject to a second separation technique, which for example can be some form of chromatography, the components leaving the second separation step and then detected. This enables a two-dimensional separation technique to be applied, wherein the two separation techniques are different, for example isoelectric focusing and an SDS/gel capillary technique. The first and second separation techniques are conveniently carried out in first and second capillaries. A further aspect of the invention provides a manifold connecting together pairs of capillaries, so as to provide multiple dual separation systems operated in parallel, for example 96 pairs of capillaries. The invention is particularly intended to provide high solution separation and high sensitivity of detection for components in biological samples.

ABSTRACT

A method and apparatus are provided for separation and detection of components within a sample, particularly biological samples. The sample is subject to a first separation technique, for example isoelectric focusing,

5   electrophoresis or the like. After this first separation step, the sample is separated into fractions, and each fraction is then subject to a second separation technique, which for example can be some form of chromatography, the components leaving the second separation step and then detected. This enables a two-dimensional separation technique to be

10   applied, wherein the two separation techniques are different, for example isoelectric focusing and an SDS/gel capillary technique. The first and second separation techniques are conveniently carried out in first and second capillaries. A further aspect of the invention provides a manifold connecting together pairs of capillaries, so as to provide multiple dual

15   separation systems operated in parallel, for example 96 pairs of capillaries. The invention is particularly intended to provide high solution separation and high sensitivity of detection for components in biological samples.